

REMARKS

The Examiner rejected claims 18, 24, and 27 under § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Applicant has canceled claims 18 and 24. The Applicant submits that claim 27 refers to the use of adhesive 22 to connect the spacer to the first and second glazing sheets before the primary sealant is applied to the glazing unit. Adhesive 22 is not a sealant. Adhesive 22 will not block moisture from entering the insulating chamber of the glazing unit. Claim 27 thus limits claim 26 to a method wherein sealant is not preapplied to the spacer when the spacer is initially applied to the glazing sheets. In view of this explanation and the cancellation of claims 18 and 24, the Applicant submits that the § 112 rejections have been overcome.

The Examiner rejected the remaining claims based on US patent 6,002,521 to Town. The Examiner has used the Town reference as a 102(e) reference and as a 103 reference in combination with Hodek, Schlienkamp, and Battersby. In response to these rejections, the Applicant has amended each of the independent claims and respectfully submits that the amended claims are patentable over the references.

The Town reference discloses a glazing unit that includes a film (6) that is used to disperse light. The film (6) is disposed in the insulating chamber of the glazing unit. The film (6) is a flexible material that is typically Mylar. The film (6) must be firmly held so that it does not wrinkle over years of use. If the film (6) wrinkles, the aesthetic appearance of the glazing unit is destroyed and the consumer asks for a warranty replacement. The problem of securely and firmly holding the film (6) taut is solved by Town by using a curable sealant (26) to anchor the perimeter edge of the film (6) in the sealant channel. The curable sealant (26) securely bonds to the perimeter edge of the film (6) and holds it taut. The

secondary sealant (28) is used to prevent moisture from entering the insulating chamber of the glazing unit.

The Applicant has amended each of the independent claims to specifically recite that the primary sealant is a non-curable or thermoplastic sealant. The independent claims have also been amended to specifically recite that the secondary sealant is a curable or thermoset material. The Applicant submits that the Town reference discloses, teaches, and suggests the opposite arrangement wherein the curable material is used as the primary sealant with the secondary sealant being the non-curable sealant. The Applicant submits that there is no suggestion in the Town reference to reverse the materials because Town requires a curable sealant to hold the perimeter edge of the film (6) in a taut condition. The Applicant thus submits that the amended claims are patentable over the references.

The invention now recited in the amended claims has significant benefits over the Town system because the flexible non-curable sealant that stops moisture from entering the insulating chamber is sandwiched between the spacer and a curable, thermoset or structural sealant on the outer perimeter of the glazing unit. This arrangement prevents damage to the critical primary sealant during shipping and handling of the glazing unit. This arrangement also provides a glazing unit that does not expose the sticky, flowable primary sealant to the exposed outer edge of the glazing unit where it can stick to people's hands and support surfaces (especially in hot weather). The method of the present invention also provides a glazing unit having the primary sealant protected against creeping and loosening due to glazing unit "pumping" that occurs in windy conditions and when there are temperature and pressure changes. The primary sealant is protected against creeping and loosening because it is sandwiched between the spacer and a curable or thermoset secondary sealant.

The method of the invention also provides a glazing unit that is less prone to attack from ultraviolet light because the secondary sealant prevents the ultraviolet light from attacking the primary sealant before the glazing units are installed in sashes. Once the glazing units are installed in the sashes, the curable or thermoset

secondary sealant prevents water from directly attacking the primary sealant if water pools in the sash against the outer edge of the glazing unit.

In conclusion, the Applicant submits that the Town reference discloses a sealant system wherein the curable sealant must be disposed directly against the spacers in order to tightly and securely hold the outer perimeter edge of the film (6). Town discloses that the primary sealant (26) is a curable sealant for this purpose. The Applicant submits that there is no motivation for one of ordinary skill in the art to reverse the positions of the Town sealants because Town requires the perimeter edge of the film (6) to be securely seated in a curable sealant. The invention now recited in the claims of the present application provides significant benefits over the prior art and is patentable. The Applicant thus respectfully requests reconsideration of the claims and most earnestly solicits the issuance of a formal notice of allowability for the claims. If any issues remain after this amendment, the undersigned attorney would welcome a telephone call.

Respectfully submitted at Canton, Ohio this 2nd day of September, 2003.

SAND & SEBOLT

A handwritten signature in black ink, appearing to read 'F. H. Zollinger, III', with a stylized flourish at the end.

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